

ATTACHMENT II**LOUISIANA TECHNOLOGY INNOVATIONS FUND – SEMI-ANNUAL PROGRESS REPORT**

[DATE]

- I DEPARTMENT/AGENCY** LADOTD
- II PROJECT TITLE / Log #** **Log # 03-008 / Internet-based, Wireless Diagnostics and Predictive Modeling System for Department of Transportation and Development Vehicle and Equipment Assets**
- III PROJECT LEADER** **Mark Suarez**
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IV DESCRIPTION OF THE PROJECT

The TIF funding provided for a pilot implementation of the captioned project. The proposed system will utilize telematics, which combines telecommunications and infomatics, a short form of information technology, to wirelessly flow in-vehicle diagnostics to a centralized fleet management system. If necessary, the fleet system responds to incoming vehicle data by appropriately notifying operators, maintenance and management personnel, and relevant vendors via the Internet and field-based hardware devices. All data is stored in a central data warehouse for interrogation and predictive modeling.

The pilot will be implemented at the DOTD Central Repair Shop in Baton Rouge with Wireless Access Points and Antennas for data collection installed at (7) seven different DOTD campus site in Baton Rouge. The pilot will also include 130 data collection devices installed in various vehicles and equipment. The software acquisition for the pilot will include all the necessary programming and/or configuration modifications that will be made to support the statewide operational requirements of DOTD.

V PROJECT STATUS**A. Brief Summary**

The project was started on March 19, 2004 with the kickoff meeting followed by the site visit on March 25, 2004. A detailed deliverables document was subsequently developed and can be provided upon request. The length limitation of this document does not allow inclusion. A short summary of the project deliverables includes a comprehensive site survey, identification of all potential hardware installation locations and configuration requirements, selection of optimum sites for hardware installations, acquisition and installation of all electrical supplies and materials, acquisition of all network supplies and materials, phased installation and validation (antenna range, etc.) of all fixed hardware, phased installation and validation of vehicle data modules, and installation and validation of wireless hand held computers.

The software portion of this endeavor involves investigation, identification, and acquisition of DOTD legacy vehicle and equipment data, identification of legacy mainframe operational and data requirements, identification of existing methodology, identification of data interface/integration/data transfer options between existing legacy systems and software used in this project, development and installation of interface solution, installation and configuration of SmartShop web portal software solution, installation and configuration of existing Event Manager Data Warehouse web portal software solution, identification and development of DOTD CRS workflow diagram, redesign and testing of the Event Manager Data Warehouse to match the DOTD CRS workflow, and software go live. Note: Redesign of Event Manager Data Warehouse was not part of the original agreement, the existing solution could be used as is. It was added by the vendor, at no cost to DOTD, to enhance the solution.

B. Accomplishments

The site visit, as documented above, occurred on March 25, 2004. Subsequent follow-up site visits have also taken place. Hardware installation locations have been finalized and efforts are being made to provide power and network access to these locations. Meetings were held with DOTD IT personnel to acquire the legacy vehicle and equipment data. The data transfer occurred quickly but the discussion and selection of the interface solution was delayed by the fiscal year end. IT personnel involved in this effort are the same personnel are responsible for the 1+ month long year end conversion for financial applications. The software solutions were implemented and functional for the June reporting deadline. Note: the optional redesign of the Event Manager Data Warehouse is ongoing.

C. Problems Encountered/Action Taken or Planned

The year end fiscal budget limitations require all funds that might have been used to acquire the electrical supplies and material, be used on strictly for equipment and vehicle repairs. This simply required us to wait for the new Fiscal 2004-'05 funding to become available.

The DOTD employee who was to perform the conduit runs and electrical installations terminated his employment with DOTD. DOTD is under a hiring freeze by Secretary Bradberry so this will require a contracted electrical service effort. Price quotes are currently being obtained. Existing section funding should be sufficient to cover this unexpected expense.

The longtime Central Repair Shop Superintendent just recently retired. The Superintendent is the person that must be the project champion in the Central Repair Shop and fully embrace the solution for a successful implementation. The power installation delay proved fortuitous in that it has allowed the new Superintendent to adjust to his new position and also given him time to fully comprehend and accept the capabilities and benefits of this project.

D. Major Milestones (Original vs. Current Estimate)

Due to the late start of the project, the TIF review committee has requested an update Baseline. The updated Baseline is being provided with this submittal. The existing legacy equipment and vehicle data was provided to the vendor and the software solutions have been installed and are available when the remaining technology can be installed and powered. The vendor has decided to modify the Event Manager Data Warehouse to more specifically match the workflow of our Central Repair Shop operation.

VI COST VS. BUDGET

<u>Category</u>	<u>Budgeted</u>	<u>Actual</u>	<u>Projected Surplus</u>
A. Equipment (in progress)			
In-Vehicle Data Module	\$ 35,750		
Workstation Personal Computer	\$ 3,500		
Workstation Printer	\$ 2,500		
Touch Station Terminals			
With Mounting Hardware	\$ 12,500		
WiFi Mobile Hand-Held			
Computers & Peripherals	<u>\$ 7,800</u>		
Total Equipment	<u>\$ 62,050</u>	\$0 (to date)	\$0
B. Software (completed)			
SmartShop System	\$120,000	\$120,000	
Event Manager Data			
Warehouse	<u>\$50,000</u>	<u>\$50,000</u>	
Total Software	<u>\$170,000</u>	\$170,000 complete	\$0
C. Telecommunications (in progress)			
WiFi Access Point / Antenna	<u>\$8,400</u>		
Total Telecommunications	<u>\$8,400</u>	\$0 (to date)	\$0
D. Professional/Contract Services (fixed cost)			
Professional Services	<u>\$50,900</u>	<u>\$30,000</u> (to date)	\$0
Total Professional Services	<u>\$50,900</u>	<u>\$30,000</u>	
E. Other Costs			
Other Cost are absorbed in DOTD's existing budget and are can be provides if requested.			
Total Project Cost			<u>\$291,350</u>

VII ITEMIZED EXPENSES AND FINANCIAL OBLIGATIONS INCURRED DURING THIS REPORTING PERIOD

Expenses To Date:

Contract For Special Services: State Project No. 737-99-0623

Contract Title: Internet-Based, Wireless Diagnostics And Predictive Modeling System For DOTD Vehicle And Equipment Assets

Contractor: TurfCentric, Inc.
7117 Florida Blvd Suite 304
Baton Rouge, Louisiana 70806

		unit	each	total
TurfCentric Software - SmartShop		1	\$120,000	\$120,000
TurfCentric Software - Event Manager		1	\$50,000	\$50,000
TurfCentric Prof. Services		200	\$150	\$30,000
			Paid	\$200,000